

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number
WO 2005/009959 A1

(51) International Patent Classification⁷: **C07D 211/28**,
A61K 31/445, A61P 31/12, 37/02

(21) International Application Number:
PCT/SE2004/001149

(22) International Filing Date: 26 July 2004 (26.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0302155-7 31 July 2003 (31.07.2003) SE
0401420-5 3 June 2004 (03.06.2004) SE

(71) Applicant (for all designated States except US): **AS-
TRAZENECA AB** [SE/SE]; S-151 85 Södertälje (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BROWN**, Dearn
[GB/GB]; AstraZeneca R & D Alderley, Alderley Park,
Macclesfield Cheshire SK10 4TG (GB). **OLDFIELD**,
John [GB/GB]; AstraZeneca R & D Alderley, Alderley
Park, Macclesfield Cheshire SK10 4TG (GB). **TUCKER**,
Howard [GB/GB]; AstraZeneca R & D Alderley, Alderley
Park, Macclesfield Cheshire SK10 4TG (GB).

(74) Agent: **ASTRAZENECA**; Global Intellectual Property,
S-151 85 Södertälje (SE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AI, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GH, GI, GM, GR, GU, HT, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **PIPERIDINE DERIVATIVES AS CCR5 RECEPTOR MODULATORS**

(57) Abstract: Compounds of formula (I) wherein R¹, R², R³, A and n are as defined; and X is S(O)₂ NR⁴R⁵ or NR⁶S(O)₂R⁷; com-
positions comprising them, processes for preparing them and their use in medical therapy (for example modulating CCR5 receptor
activity in a warm blooded animal).

WO 2005/009959 A1